

JUN 20 2002



K020539  
1052

THE TITANIUM WHEELCHAIR COMPANY

## 510(k) SUMMARY

**Date:** February 15, 2002

**Present by:**

Ms. Sandra Gladstone  
TiSport  
1426 East Third Avenue  
Kennewick, WA 99337  
509-586-6117 ext. 260  
509-586-2413 fax

**Trade / Proprietary Name:** TiPower RimPower X and SX and  
TiPower PowerDrive X and SX

**Common Name:** Folding power/manual wheelchair

**Classification Name:** Powered Wheelchair (per 21 CFR section 890.3850)

**Classification:** Class II

**Panel:** Physical Medicine Device Prosthetic Devices Subpart D

**Product Code:** 890.3860 (Powered Wheelchair)

**Legally Marketed Device Claiming Equivalence To:** Commuter (K934232)

**Description of Device:** The TiPower RimPower and PowerDrive X and SX are folding power/manual titanium wheelchairs.

**Intended Use of the Device:** The intended use of this device is the same as the predicate device, the Commuter, manufactured by Fortress Lite-Style Wheelchairs, Inc. It is intended to provide mobility to physically impaired individuals while providing them with a power or manual propulsion method.

**Target Population:** The specific medical conditions for which the device is indicated are listed as, but not limited to:

Spinal chord injury  
Stoke/CVA  
Post Polio Syndrome  
Spina Bifada  
Amputee  
Multiple Sclerosis  
Arthrogriposis  
Muscular Dystrophy  
Lower and upper extremity paralysis

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**Testing Results:** Meets the requirements of the ISO 7176 Parts 1, 3, 5, 7, and 8 Standards (other parts not applicable) and ANSI/RESNA WC/Vol. 2-1998 Section 21 and EN 12184;1999.

**Device Comparison:** There are no significant functionality differences between the submitted device and the predicate device. However, the differences between the Commuter folding power/manual wheelchair and the TiPower RimPower and PowerDrive X and SX folding power/manual wheelchair are the materials used in the manufacturing of the frame and the power packs are made from a different company. The Commuter frame material is aluminum where the TiPower chair frames are made of titanium and the cross tubes are made from aluminum. TiSport believes that manufacturing the frames out of titanium vs. aluminum is a benefit not only from a safety perspective but clinically as well because of titanium's proven superior strength-to-weight ratio and its natural ability to absorb vibration. The power unit on the TiPower chairs performs the same function as the Commuter's power unit but we believe it is better because the battery is significantly smaller and lighter and the motor is in the wheel hub verses being mounted to the frame. The chair requires less human propulsion to move the chair and the power unit is more energy efficient. The rear wheels can be changed easily to lighter weight manual rear wheels. The TiPower offers a wider range of customization allowing for a better opportunity to properly "fit" the end user in a clinical setting as well as ensuring better safety and access to the chairs options and accessories.



Food and Drug Administration  
9200 Corporate Boulevard  
Rockville MD 20850

JUN 20 2002

Ms. Sandra Gladstone  
Vice President Operations  
TiSport  
1426 East Third Avenue  
Kennewick, WA 99337

Re: K020539  
Trade Name: TiPower RimPower and PowerDrive X & SX  
Regulatory Number: 890.3860  
Regulatory Name: Powered wheelchair  
Regulatory Class: II  
Product Code: ITI  
Dated: April 12, 2002  
Received: April 15, 2002

Dear Ms. Gladstone

We have reviewed your Section 510(k) premarket notification of intent to market the device referenced above and have determined the device is substantially equivalent (for the indications for use stated in the enclosure) to legally marketed predicate devices marketed in interstate commerce prior to May 28, 1976, the enactment date of the Medical Device Amendments, or to devices that have been reclassified in accordance with the provisions of the Federal Food, Drug, and Cosmetic Act (Act) that do not require approval of a premarket approval application (PMA). You may, therefore, market the device, subject to the general controls provisions of the Act. The general controls provisions of the Act include requirements for annual registration, listing of devices, good manufacturing practice, labeling, and prohibitions against misbranding and adulteration.

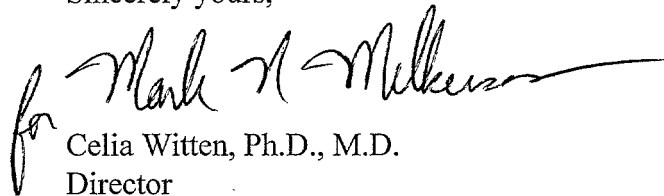
If your device is classified (see above) into either class II (Special Controls) or class III (PMA), it may be subject to such additional controls. Existing major regulations affecting your device can be found in the Code of Federal Regulations, Title 21, Parts 800 to 898. In addition, FDA may publish further announcements concerning your device in the Federal Register.

Please be advised that FDA's issuance of a substantial equivalence determination does not mean that FDA has made a determination that your device complies with other requirements of the Act or any Federal statutes and regulations administered by other Federal agencies. You must comply with all the Act's requirements, including, but not limited to: registration and listing (21 CFR Part 807); labeling (21 CFR Part 801); good manufacturing practice requirements as set forth in the quality systems (QS) regulation (21 CFR Part 820); and if applicable, the electronic product radiation control provisions (Sections 531-542 of the Act); 21 CFR 1000-1050.

This letter will allow you to begin marketing your device as described in your Section 510(k) premarket notification. The FDA finding of substantial equivalence of your device to a legally marketed predicate device results in a classification for your device and thus, permits your device to proceed to the market.

If you desire specific advice for your device on our labeling regulation (21 CFR Part 801 and additionally 21 CFR Part 809.10 for in vitro diagnostic devices), please contact the Office of Compliance at (301) 594-4659. Additionally, for questions on the promotion and advertising of your device, please contact the Office of Compliance at (301) 594-4639. Also, please note the regulation entitled, "Misbranding by reference to premarket notification" (21CFR Part 807.97). Other general information on your responsibilities under the Act may be obtained from the Division of Small Manufacturers, International and Consumer Assistance at its toll-free number (800) 638-2041 or (301) 443-6597 or at its Internet address <http://www.fda.gov/cdrh/dsma/dsmamain.html>

Sincerely yours,

for Mark A. Milken

Celia Witten, Ph.D., M.D.

Director

Division of General, Restorative  
and Neurological Devices

Office of Device Evaluation

Center for Devices and

Radiological Health

Enclosure

Ver/3-4/24/06

Applicant: TiSport

501(k) Number (if known):

K020539

Device Name: TiPower RimPower and PowerDrive X & SX

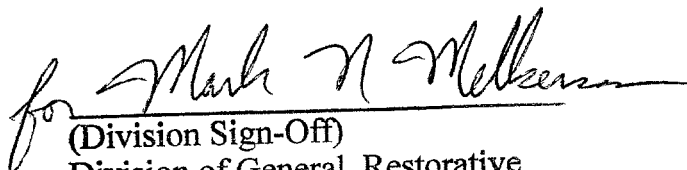
Indication for Use:

The intended use of this device (power/manual wheelchair) is the same as the predicate device, the Commuter (K934232). The intended use for the power/manual wheelchair is to provide mobility to physically impaired individuals. These chairs will allow the user to have a battery powered wheelchair or they can disengage the drive mechanism and have a manual wheelchair.

The specific medical conditions for which the device is indicated are listed as, but not limited to:

Spinal chord injury  
Stoke/CVA  
Post Polio Syndrome  
Spina Bifada  
Amputee  
Multiple Sclerosis  
Arthrogriposis  
Muscular Dystrophy  
Lower and upper extremity paralysis

**PLEASE DO NOT WRITE BELOW THIS LINE – CONTINUE ON ANOTHER PAGE IF NEEDED)**  
Concurrence of CDRH, Office of Device Evaluation (ODE)

for 

(Division Sign-Off)  
Division of General, Restorative  
and Neurological Devices

510(k) Number

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